



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE MISNAMED INDIANA ANTICLINE.¹

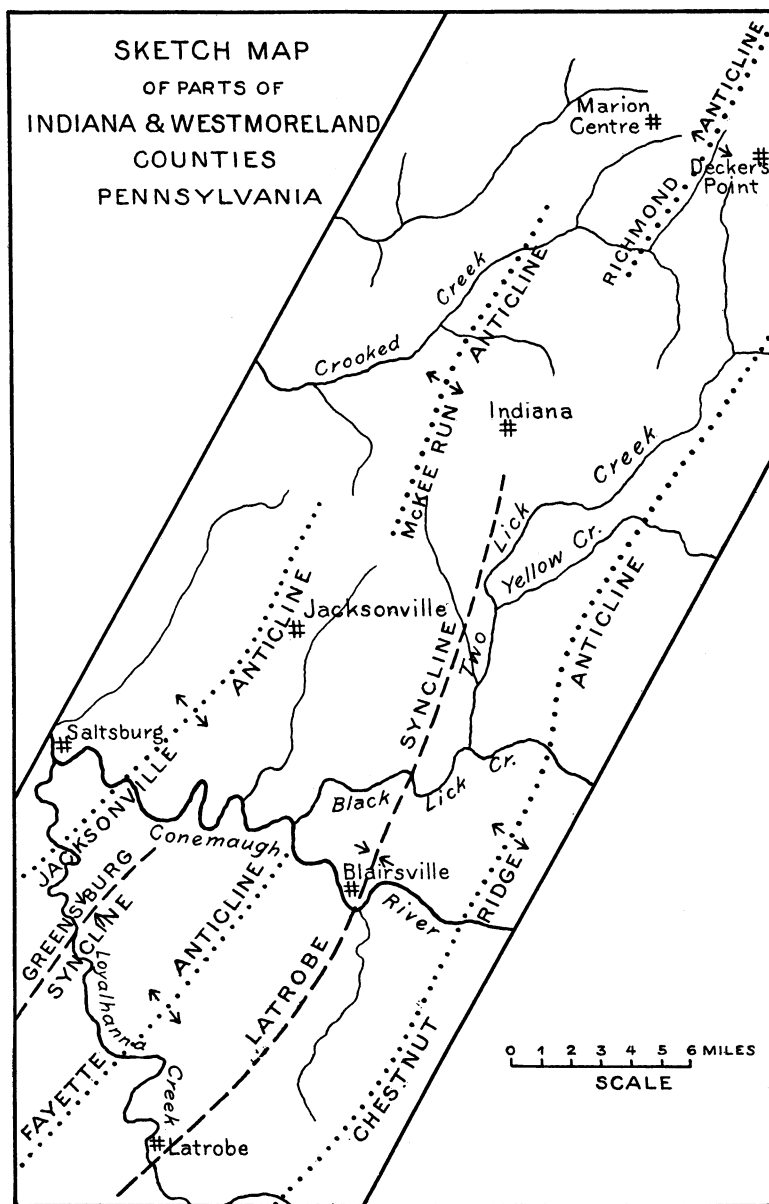
RECENT work by the United States geological survey in western Pennsylvania has revealed a number of unsuspected facts of geologic structure. The results are being published in folios in which the lay of the rocks is shown by deformation contours, but it is thought desirable to call attention here to the finding of a syncline where formerly there was considered to be an anticline.

The map of Indiana county issued by the second geological survey of Pennsylvania shows the Indiana anticline to extend in a straight line through the town of Indiana. This supposed fold has been thought to be continuous on the southwest with the Fayette anticline in Westmoreland county and on the northeast with the anticline which is well marked near Richmond, on Little Mahoning Creek. The name Indiana anticline, therefore, has been applied to the entire fold. This term has passed into geologic literature and is still being used.

In the area adjacent to the type locality of the fold, however, the structure, as indicated by the accompanying sketch map, is quite different than previously interpreted. The Richmond and Fayette anticlines are not continuous, but the former pitches southwestward and the latter pitches northeastward, and the area between the Conemaugh River and Crooked Creek, along the extension of the axes of these folds is occupied by the Latrobe syncline. It is an odd coincidence that the axes of the Richmond and Fayette anticlines fall in line with each other, and it is not surprising that these folds have been thought to be continuous, for in the intervening region surface exposures are poor and the structure can be deciphered only by detailed work. The present determination is fully proved by the records of some fifty diamond drill holes lately put down by the Rochester and Pittsburg Coal and Iron Company.

Structural details will be published in the forthcoming Indiana

¹ Published by permission of the director of the United States geological survey.



and Latrobe folios, so that only a few words need be added in explanation of the map. West of the Chestnut Ridge anticline the Latrobe syncline forms the northern extension of the Connellsville basin. This syncline rises and flattens out between Blairsville and Indiana, displacing the two westward succeeding folds. These folds are the Fayette anticline and the Greensburg syncline. Well developed where they cross Loyal Hanna Creek, northward in the vicinity of the Conemaugh River they fade away and merge into the western flank of the Latrobe syncline. The next fold to the west is the Jacksonville anticline, which has its maximum development near the town of Jacksonville. Southwest of Indiana there is an offset in the axis of this fold. Thence the arch continues northeastward, as the McKee Run anticline, and forms a low fold separated from the Chestnut Ridge anticline by the extension of the Latrobe syncline. Northeast of Indiana this syncline is divided in two by a south-plunging anticline, which, passing between Decker's Point and Marion Center, is well marked near the town of Richmond.

GEORGE B. RICHARDSON.

WASHINGTON, D. C.